



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,938	12/03/2003	Holger Hoppe	QIM 2002 P 50212 US	4491
68038	7590	02/11/2008	EXAMINER	
SLATER & MATSIL, L.L.P.			NGUYEN, VINH P	
17950 PRESTON ROAD				
SUITE 1000			ART UNIT	PAPER NUMBER
DALLAS, TX 75252			2829	
			MAIL DATE	DELIVERY MODE
			02/11/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/725,938	<b>Applicant(s)</b> HOPPE, HOLGER	
	<b>Examiner</b> VINH P. NGUYEN	<b>Art Unit</b> 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 15-18, 23, 25 and 30-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 15-18, 23, 25 and 30-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2829

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-11,15-18,23, and 30-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, it appears that the limitation of “unloading the semiconductor device from the test carrier based on a criterion, wherein the criterion is based on the electrical coupling between the test carrier and the semiconductor device obtained from the test” does not have support in the original specification and this limitation introduce new matters. Furthermore, It appears that the instant application is related to a determination of the contact between the contacts of the carrier (11a) and the contacts of the semiconductor device (3a), therefore the limitation of “unloading the semiconductor device from the test carrier based on a criterion...”as recited in claim 1 is also improperly claimed.

In claim 30, it appears that the original specification does not disclose that the contact tester is used for determining good or defective contacts of the semiconductor devices. It appears that the instant application is related to a determination of the contact between the contacts of the carrier (11a) and the contacts of the semiconductor device (3a), therefore the limitation of a contact tester electrically contacting the carrier, wherein the contact tester tests determines good or defective contacts and functional tester physically separated from the

contact tester , wherein the functional tester tests an electrical functionality of semiconductor devices with good contacts” as mentioned in claim 30 is also improperly claimed.

In claim 35, it appears that the limitations of “identifying semiconductor devices with defective connections based on the measurement” and “unloading semiconductor devices with defective connections from the carrier” do not have support in the original specification and these limitations introduce new matters. It appears that the instant application is related to a determination of the contact between the contacts of the carrier (11a) and the contacts of the semiconductor device (3a), therefore those mentioned limitations in claim 35 are also improperly claimed.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,3,5-6,8-9,23are rejected under 35 U.S.C. 102(e) as being anticipated by Hash (Pat # 6,734,683).

Since the unloading step as recited in claim 1 and the steps of identifying defective semiconductor device and unloading defective semiconductor device as recited in claim 35 introduce new matters, these limitations are not given any patentable weight.

As to claims 1-2 and 35, Hash discloses in figures 2-3 method and apparatus for in circuit testing of sockets having a semiconductor device (10) with one or more exclusive test contacts (electrical contacts on the bottom of the device (10)), a test carrier (socket "12") with contacts for making contact with the exclusive test contacts of the device (10)) and a testing apparatus (16,18) for testing the contact between the semiconductor device (10) and the test carrier (12) (see column 3, lines 53-column 4, lines 14).

As to claim 3, it appears that the carrier is connected to the testing apparatus (16,18) and the carrier is subsequently loaded with the semiconductor device.

As to claim 5, the electrical coupling between the carrier and the semiconductor device is tested by the testing apparatus (16,18).

As to claim 6, the testing apparatus (16,18) is configured such that it tests the contacting electrical coupling between the carrier (12) and the semiconductor device (10) but not functioning of the semiconductor device (10).

As to claim 8, it appears that the apparatus of Hash determines during the testing of the contacting electrical coupling between the carrier and the semiconductor device whether an electrical contact has been established between a corresponding pad test contact of the semiconductor device and an assigned pad of the carrier (12) after loading of the carrier (12)

with the semiconductor device (10).

As to claim 9, it appears that the apparatus of Hash determines during the testing of the carrier and the semiconductor device whether a respective electric electrical contact has been established between a plurality of test contacts of the semiconductor device and respectively assigned pads of the carrier (12) after loading of the carrier with the semiconductor device (10).

As to claim 23, it is well known that the semiconductor device (10) has one or more exclusive test contacts are provided its bottom.

As to claim 39, the testing system of Hash does not test the electrical functionality of the semiconductor device.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hash (Pat # 6,734,683).

Since the limitation of “a contact tester electrically contacting the carrier, wherein the contact tester tests determines good or defective contacts and functional tester physically separated from the contact tester, wherein the functional tester tests an electrical functionality of semiconductor devices with good contacts” is not given any patentable weight.

As to claim 30, Hash discloses in figures 2-3 method and apparatus for in circuit testing of sockets having a semiconductor device (10) with one or more exclusive test contacts (electrical contacts on the bottom of the device (10)), a test carrier (socket "12") with contacts for making contact with the exclusive test contacts of the device (10)) and a testing apparatus (16,18) for testing the contact between the semiconductor device (10) and the test carrier (12) (see column 3, lines 53-column 4, lines 14).

Hash does not mention about a functional tester for testing an electrical functionality of semiconductor devices with good contact.

However, it would have been well known in the semiconductor art to use a functional tester for testing the electrical functionality of the semiconductor devices with good contacts.

It would have been obvious for one of ordinary skill in the art to provide a further functional tester in the device of Hash so that a separate functional test is performed on the semiconductor devices with good contacts.

7. Applicant's arguments with respect to claims 1-29 filed on 08/15/07 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is 571-272-1964. The examiner can normally be reached on 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HA T. NGUYEN can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated



Application/Control Number: 10/725,938  
Art Unit: 2829

Page 8

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINH P NGUYEN/  
Primary Examiner  
Art Unit 2829